

## INTERNATIONAL SEARCH REPORT

stional Application No

/GB2004/002834

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B60N2/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category <sup>*</sup>	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 34 22 695 A (ROEMER BRITAX AUTOGURTE GMBH) 19 December 1985 (1985-12-19) page 12, line 28 - page 13, line 7; figures 3,4 -----	1-7
Y	EP 0 844 938 A (MACLIVER KEVIN SCOTT) 3 June 1998 (1998-06-03) cited in the application the whole document -----	1-7
A	EP 0 164 909 A (ASE UK LTD) 18 December 1985 (1985-12-18) page 3, line 31 - page 4, line 3; claim 10; figures 1-4 -----	1,2
A	US 2001/052724 A1 (KAMPER RALF ET AL) 20 December 2001 (2001-12-20) abstract; figures 1-6 -----	1-3,5
		-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

7 October 2004

Date of mailing of the international search report

14/10/2004

Name and mailing address of the ISA

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**INTERNATIONAL SEARCH REPORT**

National Application No

/GB2004/002834

**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 967 113 A (TORGERSEN HANS & SOENN) 29 December 1999 (1999-12-29) abstract; figures 1-4 -----	1,2,7

## INTERNATIONAL SEARCH REPORT

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
DE 3422695	A	19-12-1985	DE	3422695 A1		19-12-1985
EP 0844938	A	03-06-1998	AU DE DE DK EP GR US AT ES WO GB PT	6885796 A 69605425 D1 69605425 T2 844938 T3 0844938 A2 3032806 T3 5997085 A 187129 T 2142605 T3 9709194 A2 2304566 A 844938 T		27-03-1997 05-01-2000 03-08-2000 29-05-2000 03-06-1998 30-06-2000 07-12-1999 15-12-1999 16-04-2000 13-03-1997 26-03-1997 31-05-2000
EP 0164909	A	18-12-1985	AT DE EP FI NO	31682 T 3561296 D1 0164909 A2 851911 A 851903 A		15-01-1988 11-02-1988 18-12-1985 15-11-1985 15-11-1985
US 2001052724	A1	20-12-2001	DE	10029551 C1		25-10-2001
EP 0967113	A	29-12-1999	SE EP SE	512317 C2 0967113 A2 9802281 A		28-02-2000 29-12-1999 27-12-1999

## PATENT COOPERATION TREATY

REC'D 02 JUN 2005

## PCT

WIPO

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

## (PCT Article 36 and Rule 70)

Applicant's or agent's file reference P5063PCT	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/GB2004/002834	International filing date (day/month/year) 01.07.2004	Priority date (day/month/year) 02.07.2003	
International Patent Classification (IPC) or national classification and IPC B60N2/28			
Applicant MACLIVER, Kevin			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> <i>(sent to the applicant and to the International Bureau)</i> a total of 3 sheets, as follows:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> <p>b. <input type="checkbox"/> <i>(sent to the International Bureau only)</i> a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the opinion</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>			
Date of submission of the demand 01.04.2005	Date of completion of this report 03.06.2005		
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Gatti, C Telephone No. +31 70 340-3464		



# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/GB2004/002834

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

### Description, Pages

1-13 as originally filed

### Claims, Numbers

1-6 received on 04.04.2005 with letter of 01.04.2005

### Drawings, Sheets

1/5-5/5 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/GB2004/002834

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1-6
	No: Claims	
Inventive step (IS)	Yes: Claims	1-6
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-6
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.  
PCT/GB2004/002834

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**Prior Art**

D1: EP-A-0 844 938 (MACLIVER KEVIN SCOTT) 3 June 1998

Document D1 discloses a vehicle safety seat for a plurality of children sitting side-by-side, as in the preamble of independent claim 1, in the first part of independent claim 2 and in the first part of independent claim 6.

**Problem**

In case of strong accelerations, as the ones induced by an accident, the safety seat is not stable, especially when the weight of the sitting children is considerable, as it happens in presence of relatively grown children.

**Solution**

Adding the safety seat with a support leg, provided with reinforcement means, connecting the body of the seat with the vehicle floor. The support leg can deform dissipating energy in case of accident-induced accelerations, and the reinforcement means allows to adapt the energy dissipation capability to the total weight of the sitting children.

These features are neither known nor rendered obvious by the available Prior Art.

Therefore independent claims 1, 2 and 6 and dependent claims 3 - 5 meet the requirements of Articles 33(2) and (3) PCT.

## CLAIMS

- 5       1. A safety seat comprising, a seat body including a base portion for being positioned on an existing seat of a vehicle and a back portion extending up from the base portion, divider means connected to the seat body for subdividing the seat body to provide a plurality of individual seats for 10 accommodating two or more children side-by-side, releasable anchoring means for connecting the seat body to anchorage points in the vehicle for securing the seat body therein; and support legs for engaging a body of the vehicle below the base portion and for supporting and providing additional rigidity to the seat body, the support legs being connected to the base portion 15 for vertical and horizontal movement with respect to the base portion, the leg assemblies having a thigh portion to engage the body and a lower portion connected to the thigh portion to engage the body of the vehicle and **characterised in that** the thigh portion has located therein a reinforcing bar to provide energy absorbing means adapted to absorb energy in the event of 20 the vehicle being involved in an accident.
2. A safety seat comprising a seat body including a base portion for being positioned on an existing seat of a vehicle and a back portion extending up from the base portion, divider means connected to the seat body for subdividing the seat body to provide a plurality of individual seats for 25 accommodating two or more children side-by-side, releasable anchoring means for connecting the seat body to anchorage points in the vehicle for securing the seat body therein; support legs for engaging a body of the

vehicle below the base portion and for supporting and providing additional rigidity to the seat body, the support legs being connected to the base portion for vertical and horizontal movement with respect to the base portion, the leg assemblies comprising an upper generally horizontal portion and a vertical portion, wherein the horizontal portion comprises inner reinforcement means adapted to absorb energy in the event of the vehicle being involved in an accident.

5           3. A seat according to Claim 1 or 2, wherein the horizontal portion is adapted to  
10           bend upwardly away from the seat.

4. A seat according to Claim 2, wherein the inner reinforcement means  
comprises a rod secured in the horizontal portion.

15       5. A seat according to Claim 1 or 2, wherein the forward end of the horizontal or  
thigh portion is adapted to bend upwardly in the event of a crash.

20       6. A safety seat comprising a seat body having divider means for sub-dividing  
the seat body to provide a plurality of individual seats for accommodating two  
or more children side by side and support legs for engaging a body of the  
vehicle below the seat and wherein the seat body has elongate sockets  
extending in a forwards direction when the seat is located in a vehicle, and the  
sockets are positioned, dimensioned and arranged to accommodate a  
horizontal or thigh portion of the legs, the legs being adopted to absorb  
25           energy in the event of the vehicle being involved in an accident and being

arranged, subsequent to an accident, for the horizontal portion to bend and the leg to be lifted from the vehicle once the energy has been absorbed.